

IN THE CLAIMS:

1. (Currently Amended) A method of pumping wellbore liquid, comprising:
installing an electric submersible pump, driven by an AC synchronous permanent magnet motor, in a wellbore; and
operating the pump at more than 4,500 rpm to pump the wellbore liquid.
2. (Canceled)
3. (Canceled)
4. (Previously Presented) A method according to claim 1, wherein the pump is a centrifugal pump.
5. (Currently Amended) A method according to claim 1, further comprising the ~~step of~~ recovering the wellbore fluid liquid to the surface.
6. ~~[[.]]~~ (Currently Amended) A method according to claim ~~[[5]]~~ 1, further comprising ~~the step of~~ transporting the wellbore liquid from a first subterranean location to a second subterranean location.
7. (Currently Amended) A method according to claim 1, wherein ~~[[.]]~~the pump is operated at more than 5,000 rpm, ~~and preferably more than 6,000 rpm.~~
8. (Currently Amended) A method according to claim 1, wherein the pump is operated at 7,000 to 7,500 rpm, ~~and preferably at approximately 7,200 rpm.~~
9. (Currently Amended) A method according to claim 4, ~~for pumping wellbore liquid in a multi-lateral drilling environment~~, wherein the pump is ~~operative to~~ draws the wellbore liquid from a plurality of lateral well bores wellbores into a central pump.

10-32. (Canceled)

33. (New) A method according to claim 1, wherein the pump is operated at more than 6,000 rpm.

34. (New) A method according to claim 1, wherein the pump is operated at approximately 7,200 rpm.

35. (New) A method according to claim 1, wherein the motor is at least a three-phase motor and the three phases are continuously driven.

36. (New) A method according to claim 1, wherein:
a power supply of the motor is located at the surface, and
the power supply models operation of the motor and calculates a rotor position of the motor.

37. (New) A method according to claim 1, wherein a power supply of the motor comprises a variable voltage chopper.

38. (New) A method according to claim 1, wherein the motor comprises:
a rotor, comprising:
a central shaft;
a plurality of permanent magnets equiangularly spaced about the shaft;
a plurality of tubular elements supporting the permanent magnets spaced at different axial locations along the shaft; and
a retaining sleeve tightly fitted over the permanent magnets so as to retain the permanent magnets on the shaft; and
a stator coaxial with the rotor, comprising:
a stack of laminations; and

radially spaced coils wound around the stack.

39. (New) A method according to claim 1, wherein the motor comprises:
a rotor, comprising:
 a central shaft; and
 a carrier sleeve loosely fitted on the shaft; and
 rings closely engaging the shaft and supporting the carrier sleeve; and
a stator coaxial with the rotor, comprising:
 a stack of laminations; and
 radially spaced coils wound around the stack.
40. (New) A method according to claim 1, wherein the motor comprises:
a rotor, comprising:
 a central shaft; and
 a plurality of permanent magnets having axial ends;
 a carrier sleeve mounted on the shaft and bearing the magnets;
 a retention sleeve extending over the magnets and having at least one
end turned in over; and
 at least one stress-relieving radially outwardly extending abutment part on
the carrier sleeve abutting an adjacent axial end of the magnets to retain the
magnets in position on the carrier sleeve without damaging the axial end of the
magnet.
41. (New) A method according to claim 1, wherein the motor comprises:
a rotor, comprising:
 an elongate central shaft; and
 elongate permanent magnets extending along the shaft, the magnets
comprising axially laminated parts to reduce eddy current losses; and
a stator coaxial with the rotor.

42. (New) A method according to claim 1, wherein the motor comprises:
- a rotor;
 - a stator coaxial with the rotor;
 - a bearing mounting the rotor to the stator;
 - a resiliently biased projection disposed on one of the stator and the bearing;
 - a receiver disposed on the other of the stator and the bearing,
- wherein the projection is operable, by rotation of the rotor, to engage the receiver, thereby rotationally coupling the bearing and the stator.
43. (New) A method according to claim 1, wherein the motor comprises:
- a rotor;
 - a housing;
 - a stator coaxial with the rotor and mounted in the housing;
 - an axial groove formed in one of the stator and the housing; and
 - an axial key engaging the axial groove, thereby rotationally coupling the housing and the stator.